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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,232	12/07/2004	Nag-Bok Lim	U 015521-1	2667
140 7590 01/18/2007 LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			EXAMINER BOTTORFF, CHRISTOPHER	
			ART UNIT	PAPER NUMBER
			3618	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/18/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/517,232

Applicant(s)

LIM, NAG-BOK

Examiner

Christopher Bottorff

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/7/04</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of Group I in the reply filed on December 4, 2006 is acknowledged. The traversal is on the ground that the claims have been amended such that the dependent claims are allegedly may not be restricted. This is not found persuasive because the dependence of a claim alone does not ensure unity of invention. MPEP § 1850, II explains that the special technical features required for unity must be features that that define a contribution over the prior art. When, as in the present case, an independent claim does not define a contribution over the prior art, an inventive link must be found between the dependent claims separately without relying on the features defined in the independent claim. Such a link does not exist between claims 4 and 5. Moreover, claim 6 does not depend from claim 1 as applicant suggests. Rather, claim 6 is independent, defines an invention that is substantially different from the invention of claim 1, and lacks the requisite special technical feature with claim 1.

The requirement is still deemed proper and is therefore made FINAL.

Claims 4-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Claims 2, 3, and 7-10 are canceled. Claim 1 has been considered.

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on December 7, 2004 was considered by the examiner.

***Drawings***

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

Claim 1 is objected to because of the following informalities: an expression such as “allowing” should be inserted between “thereby” and “free steering” in line 16 and the singular “an” should be deleted in favor of the plural “devices” in line 22. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is replete with indefinite language. Some examples include, but are not limited to: the expression “another one being defined” in line 11, which does not clearly state the structure that comprises the “other one” or how the other one is defined, and the “chair body” in line 16, which lacks antecedent basis. When proper antecedent basis is provided to “chair body” in line 16, “a chair body” in line 20 should be amended to read “the chair body.” In addition to carefully reviewing claim 1 for clarity and accuracy, Applicant should review the dependent claims for clarity and accuracy to permit rejoinder later in prosecution in the event that rejoinder is appropriate.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rabinovitz et al. US 5,335,741 in view of Jiang US 6,325,167.

Rabinovitz et al. disclose a wheelchair with at least a pair of rear drive wheels 16 arranged in left and right chair frame sections and a pair of driven wheels 65a arranged in the left and right chair frame sections. See Figures 1C-2C. The wheelchair includes at least one pair of caterpillars 26, 26' that are forced driven by an auxiliary power source 60, at least one caster wheel 19, and wheel-hub mounted ratchet devices 95, 101 that connect or disconnect the drive wheels 16 from the caterpillars. See Figure 2B and column 7, lines 55-67.

Each caterpillar has a plurality of cylindrical wheels 44a, 44b with rotary shafts in their central portions and grooves 43 in their peripheries so that at least one flexible belt 26 is wound around the wheels. See Figure 2A and column 5, lines 56-61. The belt 26 is in contact with the wheels to define linear sections between adjacent ones of the wheels so that the linear sections define a plurality of sides of at least a triangle. See Figure 2A. One of two sides of the triangle has an obtuse exterior angle there between being parallel with the ground side. See Figure 2A at rear wheel 44b. At least one of the wheels 44a is provided means being driven by transmitted force. See Figure 2C.

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Means 80, 84, 108 are provided for coupling the wheels to the entire chair frame, including a front section of the chair frame, such that the wheelchair readily drives over obstacles or depressions on a road. See Figure 5; column 7, lines 37-42; and column 8, lines 14-33.

Control means 34 lift the caster and front section of a chair body up and down. See Figure 2A. The caster wheel 19 is provided coincidentally with the caterpillars so that the caster wheel 19 and the caterpillars selectively contact the ground to facilitate turning and climbing, thereby allowing free steering toward all directions. See Figures 1A and 2A. The caster wheel 19 and the caterpillars alternately support a front section of the chair body on the ground. See Figures 1A and 2A.

Rabinovitz et al. do not disclose that the caterpillars are configured such that the frontmost wheel forms an approach angle with respect to the ground. However, Jiang teaches the desirability of configuring wheelchair caterpillar drives with a plurality of sides in which one of two sides has an obtuse exterior angle there between being parallel with the ground side (see angle at wheel 52) and the frontmost wheel 51 forms an approach angle with respect to the ground. See Figures 1 and 7-11. From the teachings of Jiang, configuring the caterpillars of Rabinovitz et al. with a plurality of sides in which one of two sides has an obtuse exterior angle there between being parallel with the ground side and the frontmost wheel forms an approach angle with respect to the ground would have been obvious to one of ordinary skill in the art at the time the invention was made. This configuration would facilitate the efficient driving of the caterpillars over obstacles.

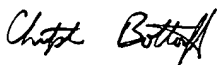
**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Winsor, Lehner, Livingston, Quigg, Avakian et al., Wild, Toselli, Casali, Chen, Foulk, Jr., Cheng, and Hedeon disclose wheelchair arrangements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christopher Bottorff